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Managing International Collaborative Research Projects

Masteroppgave i Styring og ledelse

OsloMet - storbyuniversitetet, Fakultet for samfunnsvitenskap, Oslo 2019

Foreword

Studying for a master's degree as a grown-up has been a privilege, and I have enjoyed focusing on interesting subjects, 15 years after my last exam at a university. I am proud to reach the finishing line of my master's thesis, being about something concerning many of my colleagues' everyday life – the management of research projects.

First of all, I would like to thank my informants, they have shared their knowledge, insight, and their time, and all the interviews were interesting and gave me the will and urge to move on. This thesis would not have been possible without you!

I would also like to say a big thank you to Sissel Hovik, my fantastic supervisor. You have been generous with your time; given constructive feedback and shared of your great insight in the collaboration and governance literature. You are very patient, and I think we finally talked about the same thesis (but all remaining weaknesses and misunderstandings are my own).

My place of work, Norwegian Social Research, NOVA, at OsloMet has generously given me time to study and to write throughout the last three years, and I would like to thank both my former leader, Kristine Krebs, and my current, Elsbet Vestvatn, for giving me this opportunity. I would also like to thank all good colleagues for being positive, giving good tips and cheering me on. Especially I would like to thank Bettina Uhrig for sharing her knowledge on EU projects and her time discussing and reading my work and Torhild Sager for helping me to edit the thesis in Word.

Thank you to my study group – I would not have been able to pass all exams without you! An extra thank you to Inger Bull, who I enjoyed "shut up and write" afternoons with, and with whom I had many nice discussions.

I want to thank my parents for babysitting ever so often while I have studied. Last, but not least, I would like to thank my family, Kenneth and Alma Sofie, for being there, patiently waiting for a partner and mother never sitting still for a long time, and who always underestimates the time she will use – I am sorry I spent this year's Easter holidays in the office. I promise I will be less busy now. At least until I find another project.

Sammendrag

Denne masteroppgaven i styring og ledelse undersøker måter å håndtere paradoksene ved internasjonale samarbeidsprosjekter innenfor EUs rammeprogrammer. Forskningsspørsmålet er "Hvordan håndterer lederne av samarbeidsprosjekter i forskning samarbeidets paradokser?" Dette hovedspørsmålet blir undersøkt med semistrukturerte intervjuer med både vitenskapelige og administrative prosjektledere av samarbeidsprosjekter, og tematisk analysert i sammenheng med nettverks- og samstyringsteori.

Studien fokuserer på fire paradokser:

- Paradokset ved å lede en sterk partner du ønsker å samarbeide med, men som også har sine egne interesser hun ønsker å forfølge
- Paradokset ved å ha et stort byråkrati når litteraturen antyder bruk av tilretteleggende tilnærming når man forvalter et samarbeid
- Paradokset ved behovet for forutsigbarhet i prosjektet, samtidig som forskingsresultater er uforutsigbare
- og paradokset ved samarbeidspartnernes ulike kulturer.

Forskningsspørsmålet og paradoksene ble analysert ved hjelp av Ansell og Gash' teorier om tilretteleggende ledelse av samarbeidsprosjekter, og klassisk ledelsesteori om ledelse og styring. Hovedfunnene i denne oppgaven er at de intervjuede koordinatorene bruker mer klassisk, autoritær ledelse og styring enn forventet med utgangspunkt i samstyringens teorier om tilretteleggende ledelse for å håndtere paradoksene, og at strukturen i EUs rammeprogrammer spiller en rolle for både å muliggjøre, men også begrense koordinatorenes ledelse.

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Abstract

This master thesis in public management investigates ways to manage the paradoxes in international collaborative research projects within the EU framework programmes.

The research question is "How do the managers of collaborative research projects handle the paradoxes of collaboration". This main question is investigated with semi-structured interviews with both scientific and administrative project managers of collaborative research projects, thematically analyzed in the context of network and collaboration theory.

The study focuses on four paradoxes:

- the paradox of managing a strong partner with whom you want to collaborate, but who also has her own interests she wants to pursue
- the paradox of having a large bureaucracy when the literature suggests using a facilitative approach when managing a collaboration
- the paradox of needing a predictable project output versus the unpredictability of research outcome,
- and the paradox of different cultures.

The research question and paradoxes were analyzed using Ansell and Gash' theories on facilitative management for collaborative projects and classical management theory on leadership and steering.

The main findings in this thesis are that the interviewed coordinators use more classical, authoritative leadership style and steering than expected with basis in the theories on collaboration to handle the paradoxes, and that the structures of the EU framework programmes play a role in both enabling, but also limiting the leadership style of the coordinators.

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List of Abbreviations

EC: European Commission

EU: European Union

HEI: Higher Education Institutions

NOK: Norwegian Kroner

NSD: Norwegian Center for Research Data

RCN: Research Council of Norway

SME: Small- and medium-sized enterprises

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1 Introduction

1.1 Background

The EU, among other organizations, is providing funding for many research projects in Europe (and beyond), which is connected to collaborative research projects. The EU's aim for choosing this model is connected to the following belief: "By coupling research and innovation, Horizon 2020 is helping to achieve this with its emphasis on excellent science, industrial leadership and tackling societal challenges. The goal is to ensure Europe produces world-class science, removes barriers to innovation and makes it easier for the public and private sectors to work together in delivering innovation" (European Commission n.d.)

Norway's contribution to the seven-year-long European framework programme, Horizon 2020, has been estimated to be circa NOK 17–18 billion, an amount expected to rise to approximately NOK 22 billion in the next framework programme, Horizon Europe (The Research Council of Norway 2019). No wonder that the Norwegian HEI sector has increased its demands to find international research funding through programmes, just as Horizon 2020. By October 2018, Norway had been granted approximately NOK 6.9 billion from Horizon 2020 and has the highest participation success rate among Nordic countries, with 16.7% (The Research Council of Norway 2019). The Ministry of Education and Research has a system for evaluating performance within research, thus The HEI sector have incentives in the financing system that rewards funding from EU framework programmes (Kunnskapsdepartmentet 2019, 52).

To be granted funding through EU, the research organization should provide an overview of the different programmes and their rules, guidelines, and demands for both the application and the implementation of projects. The framework programmes have different requirements for building a consortium, which can have up to 25-35 different partner institutions from many different countries and many different stakeholders. The implementation of the project should go well because the projects will function as a showcase for further proposals, funding, and further search for project partners internationally.

I started looking into the EC Research & Innovation's Participant Portal for Horizon 2020 projects, where they provide different online manuals on how to run these projects. Mostly, these manuals discuss the technical execution and management of these projects, but there is little mention about how to actually manage people in these projects. After searching the EC websites, I found a document with 10 practical tips on how to successfully manage a Horizon

2020-funded project (European Commission n.d., 2). One tip for managing people is as follows: “Focus first on people, instead of formal tools or structures. Research management is a people business and should ideally not rely on formal tools or hierarchical management styles. It is advisable to use an all-inclusive and consensus-based management style.”

I could not find any reference to research for this tip, so how can the willing coordinator gain more knowledge? There is an EC grant in your pocket, you checked all the boxes for technical demands – how do you use the “all-inclusive and consensus-based management style” on all your partners and get them to contribute to the project? How do you lead people who have a different leader in their own organization? With whom do you not have a formal contract of employment? Does this consensus-based style even work?

There is a notion of a paradox in these collaborations. Erik Ernø-Kjølhede (2000) has written about the paradoxes of research management and how there is a need to balance different needs, such as the researchers’ desire for autonomy and their need to cooperate and compete at the same time. The EU projects have many formal demands as well as strict structures, but the researchers employed within them are from several different organizations and are people who should be creative and flexible. Some describe researchers as the artists of academia, and participants in organizations described by some as organized anarchy (Cohen, March, and Olsen 1972), who must be cuddled and kept well and happy. And Chris Huxham and Siv Vangen (2005) argue that collaboration is demanding and hard, but is an asset if done successfully, but their conclusion is “Don’t do it unless you have to!”

1.2 Research question

The background information in the introduction led me to my research question:

How do the managers of collaborative research projects handle the paradoxes of collaboration?

1.3 Significance of the study

Although a lot of project management literature and governance literature exist, literature specifically on managing international collaborative research projects seems scarce. I believe my study can be interesting for the future execution of these kinds of projects, and even projects outside the EU system with a network or consortium type of setup.

The findings of this study will hopefully benefit the research community in pursuing research funding from the EU or the RCN, who more and more apply standards to proposal writing

and reporting similar to the ones found in the European framework programmes. Not only are there demands to excellence in science and impact, but the implementation and execution of the projects are important to consider from early on in the proposal process.

Unexperienced, or even experienced, managers and coordinators can benefit from having a clear vision on what it will actually take to manage these projects from a leadership point of view. These projects are said to never have enough funding or time for the researchers to complete. Knowing a little about what the challenges are in taking on the coordination of a collaborative research project and how to handle them could save the coordinator both time and money.

As I had trouble finding any literature on managing collaborative research projects, I hope this thesis can add to the field of collaboration or governance networks and provide some direction as to whether this research could be explored further.

1.4 Limitations

In this project, I chose to explore theories on management, governance, and collaboration regarding Norwegian institutions with a similar regulatory framework and culture.

I do know there are so-called grey papers out there connected to various courses in research management, for example connected to the research managers' associations, such as EARMA (European Association of Research Managers and Administrators), but I chose to look for literature available through a search of scientific literature.

Further, I wanted to look into finished projects within any of the EU funded framework programs in Norway, and I wanted to interview either the scientific coordinator and/or the project manager; in some cases, the project manager and the scientific coordinator are the same person. I wanted to investigate projects that had been coordinated from within Norwegian institutions, and if management was divided — it had both a scientific coordinator and a project manager — I wanted to interview both

In addition to my informants, I chose to conduct a pilot interview with a coordinator of a proposal process.

The few number of informants is certainly a limitation of my thesis, one that I hope I can overcome by a thorough analysis of the interviews I did conduct.

2 The collaborative research project in the context of the EU framework programmes

When implementing, or even applying for, an international collaborative research project, an institution with one, usually, experienced researcher takes the lead. The leading researcher, known as the scientific coordinator or manager, will sometimes share the leader role with an administrative project manager or take on both roles. In this thesis, I will define these roles as presented in the table below.

Table 1 — Coordinators in the collaborative research project

Scientific coordinator	Scientific leader in a dual management role with a project manager
Project manager	Administrative leader in a dual management role with a scientific coordinator
Scientific project manager	Scientific leader taking on the management alone

The structure of these projects are set by the Horizon 2020 programme's call topic descripton, which usually specify the minimum amount of consortium members and the recommended budget, and so on. The EC is managing these EU research and innovation programmes, for example hosting the participant portal. The institutions will through their networks try to put together a consortium with partners that are a good fit, usually other research institutions and universities. In some programmes there is also demand to include SMEs or stakeholder organizations.

The structure of the project management is clarified in the proposal, which is divided into work packages. Usually, one work package is called "project management" and includes the managerial tasks of the project, such as the following:

- Manage the project and the overall coordination of activities
- Ensure implementation of work packages
- Ensure timely achievement of project results
- Manage administrative and financial coordination
- Ensure scientific excellence of research and deliverables

(This example of a work package one is from the Horizon 2020 funded project Negotiate.[1])

[1] EU-funded project *NEGOTIATE – Negotiating early job-insecurity and labour market exclusion in Europe*. Project/grant agreement number: 649395. H-2020-YOUNG-2014-2015/H2020-YOUNG-SOCIETY-2014. Duration March 2015-February 2018.

In addition, there is usually a description of the responsible managers, the work package leaders, and the steering/technical committee.

The specific chain of command will not be crystal clear, as the partners are bound together by trusting each other throughout the proposal process. The coordinator takes on the task of coordinating the proposal and the budget, putting together the work packages, appointing work package leaders, and submitting the proposal to the EC. When and if the proposal is approved and funding is granted, the coordinator has to coordinate the process of signing the grant agreement and developing a consortium agreement to commit the partners to each other and to the EU.

3 Theory

I have chosen literature on governance networks in addition to literature on classical, hierarchical management to look into the management of the collaborative research project.

Asbjørn Røiseland and Signy Irene Vabo (2012, 22-23) have translated parts of the term "governance" into "samstyring" in Norwegian. Their definition includes three aspects:

- Interdependence due to cooperation and the various amount of resources
- Decisions made through discourse or negotiations
- Planned and goal-oriented activity, not just actors coming together by chance

This way of defining governance has a lot of overlap with the literature on governance networks. Eva Sørensen and Jacob Torfing (2007, 9) define governance networks as the following: "1. as relatively stable horizontal articulation of interdependent, but operationally autonomous actors; 2. who interact through negotiations; 3.which take place within a regulative, normative, cognitive and imaginary framework; 4. that is self-regulating within limits set by external agencies; 5. which contributes to the production of public purpose."

Collaboration can be defined as situations where people work together across organizational boundaries to accomplish common aims (Huxham and Vangen 2005). The cooperation is voluntary, and collaboration needs management and leadership.

The collaborative research project can be seen as a governance network, as it consists of a consortium of many autonomous organizations that fit well together..

3.1 The paradoxes of collaboration

According to Erik Ernø-Kjølhede (2000, 5) at Copenhagen Business School, the management of research projects involves balancing the following paradoxes:

- researchers' desire for a large degree of autonomy in their work and democracy in decision making versus the need for strict project control (adherence to budget and time limits)
- the fact that researchers both co-operate and compete with each other in the project (competition for credit in the form of publications/competition for positions, grants etc. which may lead to conflict between the joint goals of the co-operation and individual goals of researchers)

- the need for predictability of project output (output with certain qualities "on time" and "on budget") versus the unpredictability of research outcome and new research opportunities arising in the course of the project (quality of output may improve if deviations from plan are allowed or it may turn out that a very different output than the one originally expected would be qualitatively better or more useful for the project's intended purpose)
- the lack of management information/difficulty of interpreting management information and uncertainty of end product and process (exactly what are we looking for and which is the best way to get there?) versus the need to act as if there is certainty and make management decisions continuously
- the knowledge asymmetry between the project manager and the individual researcher (the latter is often in a better position to make decisions regarding his or her research)
- the need to take risks to be innovative vs. the need to reduce risks to ensure the delivery of the desired result on time and budget.

These paradoxes can resemble the very paradox of collaboration as described in the governance literature — especially the paradox of managing competent people who desire autonomy and who cooperate while competing. Siv Vangen (2016, 264) claims that "collaborations are vital in addressing societal challenges yet frequently unable to deliver successful outputs in practice". The very nature of collaboration is paradoxical, as the resources, hierarchies and systems necessary to achieve desired outcomes are complex and overlapping. I look into the actual governance possibility of the consortium's coordinator in such paradoxical circumstances. For example, Røiseland and Vabo (2012, 43) claim that all of the participants will be interested in managing cooperation and will try to impose themselves into the management process. They further claim the participation is voluntary, but it is crucial that the cooperation is taken advantage of without harming the willingness of the participants to cooperate (2012, 44). There is a paradox in having to lead and manage people and in trying to make them deliver on time and do what the project require while keeping their willingness to deliver. According to Ladegård and Vabo (2012), there is an expectation by public employees that those who are led — the followers in an organization — should have a say in matters concerning them. The university sector in Norway has been known to have classical collegial management: the board of the institutions has internal members and the leaders have been recruited from internal employees (Ladegård and Vabo 2010). In addition, I wonder if there is also a cultural paradox, since the strength of these consortia is

the different people with their different backgrounds and resources, but these differences make it hard to lead them in one way, or maybe lead them at all.

The paradoxes of collaboration seem to be well founded, but what if we take into consideration that collaboration has to be implemented within the frames of academia?

The understanding of academia as hard place to be a leader is well known. Calling the researcher the artist of the academia is a way to describe the excellence, determination and passion of the researchers. Helle Hedegaard Hein (2013) has written about prima donna management. Prima donna means first lady, and the term is usually connected to an artist, but Hein uses it to describe the highly skilled and highly competent employees who work with complex tasks and with a lot at stake. How managers and leaders are set out is crucial to how they perceive their ability to solve their tasks. The prima donnas have higher loyalty toward their work than to the organization itself. They have high demands for their workplace, are often seen as hard to lead. Connected to Ernø-Kjølhede's paradox in which these researchers need to cooperate and compete with each other while they desire a large degree of autonomy, I wonder how this can be solved by the coordinators in the collaborative research projects. Will this change the way collaborative management is carried out?

Considering the institutional and cultural differences, as well as the need to work independently and within a framework given by the EU, the coordinators seem to have to maneuver through a maze of paradoxes. Røiseland and Vabo (2012) claim that networks have fluid borders and must be managed carefully. They also say that there are several possibilities to steer governance networks, even if the power, more or less, has to be shared with others in the collaboration process. In my analysis, I focus on four paradoxes: the paradox of managing a strong partner with whom you want to collaborate, but who also has her own interests she wants to pursue; the paradox of having a large bureaucracy when the literature suggests using a facilitative approach when managing a collaboration; the paradox of needing a predictable project output versus the unpredictability of research outcome; and the paradox of different cultures — scientific cultures, cultures connected to different countries, and so on.

3.2 Management — Steering and leadership of the collaborative research project

3.2.1 Leadership and steering

Huxham and Vangen (2005, 61) says about collaboration "…at first glance it may appear that partners only need to be concerned with the joint aims for the collaboration, in reality

organizational and individual aims can prevent agreement because they cause confusion, misunderstanding and conflicts of interest." This has to be handled to make the collaboration move forward.

Any network needs someone to coordinate its activities (Provan and Kenis 2008), which means the consortium needs to find a way to solve this. The EU programmes expects a lead partner or a coordinator. In the traditional way of defining management, it is defined as being both steering and leadership, which are two sets of measures to solve coordination challenges in connection with organizations (Ladegård and Vabo 2010). Such challenges, as finding a joint aim and the other previously mentioned paradoxes, have to be handled. Leadership is the measure aimed directly toward employees, and steering is the administrative measure, or the housekeeping; the first is person-oriented, whereas the second is system oriented. Management, as a total, is defined by Christensen et al. as an attempt to make collective decisions and influence behavior by a set or a system of formalized steering instruments (Christensen, et al. 2015). I will try to separate leadership and steering in my analysis.

In collaboration initiated from a superior authority or in other forms of formalized cooperation, it is possible, according to Sissel Hovik (2018), to identify a management in the form of a steering or project group and an operative leader. She also says that the leader of the collaborative project has limited or no possibility to execute top-down management, which has consequences for how to take on the collaborative management.

The leader is central in the management; she influences through social relations, values and norms, or through being a role model. (Ladegård and Vabo 2010, 18). There are also perspectives within the research on the consequences of management describing features of the organizations as being a substitute for leadership — for example, elements of steering. These measures have to be standardized, and they can contribute to stability (Ladegård and Vabo 2010). When convening a consortium, Røiseland and Vabo consider choosing the network members as steering (Røiseland and Vabo 2012, 75).

Provan and Kenis (2008) claim there are three tensions appearing in networks: efficiency versus inclusiveness, internal versus external legitimacy, and flexibility versus stability. These so-called tensions seem to be quite similar to what Ernø-Kjølhede, Huxham, and Vangen call paradoxes. They say to increase efficiency, networks can transform into what they call a lead organization model, in which all key decisions and all network level activities are coordinated

through one network member. The research consortia can from this theory look as if they are the lead organization models, as the goals of the network (consortium) will usually align with the lead organization's goals. Provan and Kenis further say that this type of governance is effective, but it can, in turn, reduce the commitment of the other participants and reduce the overall network effectiveness. To maintain legitimacy, stability is crucial. Stable networks are important for helping participants form long-term relationships so they can know each other well enough to maximize network outcomes. Ladegård and Vabo (2010) say that steering measures have to be standardized to contribute to stability, and Provan and Kenis argue that the most obvious instrument to maintain stability is a formal hierarchy. However, this will not benefit the network as a form established to meet the demand for flexible and adaptable alternatives to the bureaucratic organizations.

3.2.2 The steward, mediator, and catalyst

Arguing that the collaborative research project is paradoxical, how do the coordinators perceive their own style of leadership and how do they handle the paradoxes? One alternative is to establish a traditional, bureaucratic, and hierarchical style. Another take on the management would be — given Hovik's claim that the leader of the collaborative has limited possibility of a top-down-management style — to go into facilitative management. Ansell and Gash (2012, 2) claim that "leadership is widely recognized as an important ingredient in successful collaboration. Collaborative leaders typically play a facilitative role, encouraging and enabling stakeholder to work together effectively."

Ansell and Gash have looked into the management of collaboration and claim there are two different styles of facilitative leadership in the collaborative setting: the professional facilitator and the organic leader, and within these two there are three roles, which I will describe in further detail below, and that will be acted out in various amounts. Ansell and Gash argues that, in terms of the leadership styles, the professional facilitators are often trained facilitators and stresses their functions as neutral mediators and has a professional role in facilitating in the collaborative process. The organic leaders come from within the group of stakeholders and what they lack in professional facilitator training, they often make up for in subject matter expertise or local knowledge (Ansell and Gash 2012, 6). I will assume in my analysis that the project managers will be in the professional facilitator category and the scientific managers in the organic leader category.

Ansell and Gash further argue that the distinctive quality of collaborative leadership is that it is facilitative rather than directive, and out of this assumption, they distill three types of facilitative leadership: the steward, mediator and catalyst (Ansell and Gash 2012):

Steward

"A steward is someone who facilitates the collaborative process by protecting the integrity of the collaborative process itself." (Ansell and Gash 2012, 18)

The role of the stewardship is to help establish the integrity of the collaborative process. I think this role can be seen at the coordinators initiating the collaboration, the researcher using her reputation and social (scientific) capital to convene the collaborative process, and the project manager contributing establishing ground rules for the process.

Mediator

"A mediator is a leader who facilitates by helping to arbitrate and nurture relationships between stakeholders." (Ansell and Gash 2012, 18)

The mediator role will help build trust between the partners and help resolve disputes. I translate this as the project manager works on the administrative sides of the project and the scientific coordinator works through context-specific knowledge, knowing what goes where in the scientific community.

Catalyst

"A catalyst is someone who helps stakeholders to identify and realize value-creating opportunities." (Ansell and Gash 2012, 18)

According to Ansell and Gash (2012), the catalyst will frame or reframe problems and create mutually reinforcing links between collaboration and innovation, the professional facilitator or project manager is less likely to be a catalyst than the organic leader, who will use her knowledge and relationships to act catalytically. I see this role being transferable to the scientific coordinator's knowledge about the core of the collaborative projects and her relationship with the other partners.

These styles and roles connect to different strategies for taking on the task of managing the network. I wanted to look into how the scientific coordinators and project managers see themselves and how they report on the strategies they use. Could there be differences between the project manager and the scientific coordinator in which roles they take on?

In the context of governance literature and the three types of managers, can any of these traits be found in the coordinators reported way of leading the projects and how they handle the complexities and paradoxes? Or will they take on the more traditional management? Or is there a hybrid between these takes on management?

In light of my theory and the paradoxes and tensions, I had the follow hypotheses:

- Coordinators will pursue stability.
- Managing research collaboration must be based on facilitative leadership styles.
- Authoritative leadership and strong steering style will not work.
- Sharing the management between two persons will enable a more facilitative leadership style.
- The given structure of the EU framework programmes will affect the leadership.

4 Method

4.1 Research design

Given my research question about how coordinators of international collaborative research projects handle the paradoxes of managing these projects, I wanted to talk to people with experience being coordinators in finalized projects in Norway. I wanted to talk to the top managers of these projects: scientific coordinators, project managers, and scientific project managers. The interviews were conducted during the winter of 2019 in the Greater Oslo Area.

The interviews were semi-structured in order to get the participant insights I needed to answer my research question. This style of interviewing keeps the interview focused but gives the informant flexibility to reveal different kinds of information. According to Braun and Clarke (2006), semi-structured interviews can provide rich descriptive data on the personal experiences of the participants. My hope was that this relatively small number of interviews would still lead to useful results, which would be applicable to other projects.

4.2 Selection of informants and selection size

I started out using my network, but as several people did not answer phone calls and/or e-mails, I had to broaden my search and use research institutions' websites and online search engines to find informants, which kept my selection more random than strategic. I kept to informants in the Oslo Area; Trondheim and Tromsø were not chosen due to the costs of traveling there and possible informants in Bergen did not respond. I could have used Skype or similar videoconference services, but as an inexperienced interviewer, I felt the need to look people in the eye without cameras and screens in between.

I ended up talking to one scientific coordinator, two project managers, and two scientific project managers. In addition, I conducted a pilot interview with a scientific coordinator of two proposal processes.

The pilot informant, one scientific coordinator, and one project manager were from my own institute, but not interviewed about projects I had been directly involved in. The other three were all informants I did not know from other institutions.

4.3 Interview guide

The interview guide (appendix 1) was created as an attempt to get information from my informants about how they led their projects, how they experienced the framework they were

in, and how they handled various challenges in them. I tried to operationalize my research question based on the theories I had read.

It is always difficult to know exactly which questions to ask and how to ask them; it is also hard to keep on track in a semi-structured interview when the informant is talking about something interesting. In my attempt to unravel the informants' experiences and behavior, I tried to make sure to cover certain topics connected to my theory in my interview guide. My interview guide had six topics with several sub-questions: background information, consortium building, leadership, framework programme structures, internal organization, and success. I only made one interview guide and did not directly ask questions concerning dual management to the scientific project managers, but since I still wondered how the division of work between the administration and the scientific project manager was handled, I did not find it to be a large issue. It was a semi-structured interview, and not every single question would be asked to each participant.

I asked the participants about their background and experience with collaborative projects and about how they saw their own leadership style in the context of a collaborative research project. To find out more about this, I asked them about the level of trust in the project and how they built the consortium — the latter is an indirect way of asking about not only trust but also whether their role changed between the proposal process and the execution stage. I also asked them about any conflicts they might have had. To find out more about what they found important in how they handled all the sides of coordinating a project, while trying to place them within the framework of Ansell and Gash's leadership roles, I also asked them about the framework provided from the EU. Moreover, I asked them about the internal framework of their institution and to what extent they had administrative support.

I also asked them about success, in hopes they would give me some reflections on their management style. Success in itself is too hard to define or measure, so I wanted them to reflect on their leadership style.

4.4 Consent, ethics, and approval

As I only had six participants, they could possibly be recognized easily if I did not handle their interviews with care. I have not connected their projects to specific programs and institutions. I know all of my informants' gender and place of work, but I will use "she" or

"her" for all informants, and I will not take their gender or their place of work into consideration in my analysis.

All Norwegian universities have to notify the Norwegian Center for Research Data (NSD) about any projects processing personal data. My notification form and the approval are in appendix 3 and 4, respectively.

According to the NSD (2018), "As a main rule, you are obligated to inform the person(s) whose personal data you are going to collect. This is a fundamental right that is entrenched in Norwegian law. The obligation to inform applies irrespective of the requirement to gain consent." To make sure I got the informants' informed consent, I prepared an information leaflet with a consent form, with the NSD's letter as template. I sent this to my informants in advance, explaining my research question, how I would conduct my interviews, and how I would use and manage my data afterward. In the interview, they were given the leaflet again and the consent form to sign. The leaflet is appendix 2.

4.5 Interviews

4.5.1 Pilot

The pilot interview was conducted with a scientific coordinator of two unsuccessful proposals but who had been a participant in other projects — as a work package leader. These experiences were very transferable to the experiences of being a leader of the proposal phase of a finished project, which meant I could easily use my whole interview guide. I also found her answers to be very relevant to my further work and could also be used into my material. I asked for her consent, which she gave, to use her interview where I saw fit, and I will use her answers in my material, where applicable about the proposal phase, as one of my scientific coordinators.

The pilot interview went pretty well, but I could see my guide was too detailed to keep a nice conversation going. I asked her, who is a Norwegian native, whether she would prefer to be interviewed in Norwegian or English and her thoughts around that. As she is a researcher herself, I used her to clarify a couple of questions about when and how to start the interview and turn on the recorder and other technicalities. The pilot informant preferred to be interviewed in Norwegian, and because my interview guide was solely in English, I had to translate on the spot. This was not a huge issue, but it forced me to prepare differently for the next interviews.

Early on in the pilot interview, I let the questions be reminders of what I wanted to cover. But I used them to ask more open and rounded questions, which gave me the possibility to connect the answers from the informant with other themes and questions without rigidly keeping to my long interview guide. The pilot gave me feedback at the end of the interview; she said she found that I had given her enough time to think and respond. Keeping to all my questions, however, would have undoubtedly made me interrupt the informant a lot more, causing the interview to last a lot longer.

Asking all my questions could have given me more precise answers but would have also probably given me fewer spontaneous answers from the informants. I also worried that if I asked all my questions rigidly, I would have made the informant think I was looking for something specific they could form their answers around.

4.5.2 The interviews

The rest of the interviews were conducted with reference to my experiences from the pilot one. I kept to a very semi-structured style and tried to cover all my themes, but I let the natural conversation flow and giving the informant room to talk about what she wanted. The interviews were all conducted in Norwegian. I conducted them in February and early March 2019 at four different research institutions in the Greater Oslo area.

I contacted one informant after transcribing her interview, as I found out that I had forgotten to ask her a question, which I wanted her response to. I asked her the question and took notes by hand, with no recording.

4.5.3 Translation

I conducted all the interviews in Norwegian. All translations are mine, as are any mistakes in the translation of quotes.

4.6 Data storage

The interviews, including the interview with the pilot informant, were recorded on a dictaphone. Neither the participants' names nor their place position was mentioned, but the informants could possibly still be identified by their voice. As the informants mainly talked about their work experiences, the information was not classified as sensitive. The interviews were transferred to a personal folder on OsloMet's server, OneDrive, and were classified as "confidential" according to OsloMet's rules: "if it could cause damage to the company, public interests, individuals or collaborators that the information becomes known to unauthorized

persons. The information should have strict access rights, the choice of storage platform must be considered carefully based on who needs access to the information" (OsloMet's internal guidelines[2]).
I was the only one who could access the folder's content; the folder was encrypted to ensure the protection of the files.

The transcripts were also secured by password and did not contain names, gender, place of work, or other data that could identify the informant; references to colleagues were also anonymized.

I asked for the informants' consent to store the recordings and transcripts until December 31, 2019, in case of any questions regarding this thesis. I will delete all recordings and transcripts by this date.

4.7 Data analysis

There were relatively few interviews, and, therefore, the quantification of the answers was not statistically interesting or even possible. The main part of data of the interviews is the long answers of the questions in the interview guide (Ringdal 2016, 245). I wanted to look for patterns in these answers to answer my research question and use the theories to see what kind of managerial roles I could find traces of.

Thematic analysis is based on finding themes in the data. Each theme is a category in which data with important common features are grouped (Johannessen, et al. 2018, 279). I chose to use thematic analysis as described by Virginia Braun and Victoria Clarke (Braun and Clarke 2006) when analyzing my interviews, as it is a flexible method for identifying, analyzing, and reporting patterns within data, which can potentially provide a rich and detailed account of the data. Braun and Clarke also consider thematic analysis to be a relatively easy method, even while still learning to do it, which I find myself to be (2006, 79). Before conducting the analysis, I had to be aware of my own theoretical position and my assumptions or biases. I wanted to connect my analysis to my theoretical framework, but I still had to keep an open mind, since other unexpected patterns or themes could have emerged in the material.

[2] OsloMet's internal webpages on data storage per January 2019.

Braun and Clarke's method for thematic analysis includes the following steps:

1. Familiarizing yourself with your data
2. Generating initial codes
3. Searching for themes
4. Reviewing themes
5. Defining and naming themes
6. Producing the report

A theme, according to Braun and Clarke (2006, 82), "captures something important about the data in relation to the research question, and represent some level of patterned response or meaning within the data set."

To use thematic analysis as a method, all interviews have to be transcribed into written form, which I did. It was a time-consuming task, but it also gave me a chance to start familiarizing myself with the data and to take notes of any thoughts I had while working. According to Braun and Clarke, the transcription itself is an interpretive act.

I kept to Braun and Clarke's method, and my transcriptions did not have the same level of detail as a discourse or narrative analysis would, but I kept a lot of attention on retaining the information I needed and tried to keep it "true to its original nature" (Braun and Clarke 2006)

Conducting all the interviews myself, I could not help having some thoughts about the content of the data, but I tried to approach the data in a distant and systematic way. After transcribing the interviews, and before starting the actual coding of the data, I read all the data and took notes of my initial thoughts. This meant moving back and forth through the material several times.

The coding was approached in a theoretical matter at first, as I had read quite a lot of literature prior to my analysis, which made me focus on theory. Early readings can lead to focusing on some aspects at the expense of others (Braun and Clarke 2006), but it was important to try to keep watch for patterns not directly connected to my theoretical framework. My codes were an attempt to enlighten my research questions and hypothesis, and I started with many codes, or categories, which I narrowed down and used to describe some aspect of the paradoxes of collaboration and the contributing factors. The coding was not entirely connected to the

theory, as I wanted to keep an open mind, and some codes could overlap. These are examples of some of the codes I merged into themes:

- **Leadership and management**, including the subcategories "decision-making," "strategy," and "experience with the EU system";
- **Administrative support**, including the subcategories "communication" and "internal bureaucracy";
- **Bureaucracy**, including the subcategories "internal" and "external bureaucracy";
- **Common aim**, including the subcategories "vision," "strategy," and "communication"
- **Trust**, including the subcategories "interdependence," "social events," and "consortium building"; and
- **Conflicts,** including the subcategories "interdependence," "negotiations," and "decision making."

I performed the coding manually, mainly in Excel. The columns represented my initial themes, when I then printed and sorted. I also made mind-charts with post-it notes to help me focus and find how the themes were connecting to one another.

4.8 Reliability and validity

Kristen Ringdal (2016) discusses whether the terms "reliability" and "validity" have any relevance for qualitative data, mainly because of their connection to quantitative data. He still concludes that the terms have their place in describing qualitative data, as they contribute to providing general terms to describe data quality.

4.8.1 Reliability

Reliability in qualitative research is, according to Johannessen, Christoffersen, and Tufte (2011), connected to the data in your research — which data are used, how the data are collected, and how they are edited. All observations are value-laden, as the researcher is her own research instrument (Johannessen, Christoffersen, and Tufte 2011). My closeness to some of the informants could have been a problem, as I knew three of them, including the pilot, from my workplace and had some insights about the projects they were involved in. I am also an administrative adviser to the management at the institute, which could have affected the informants' resposes if they had not found me trustworthy.

The fact that I knew them could also have affected me as the interviewer, as I could have allowed my previous knowledge to affect the project. My personality or even my presence could have had an effect on how they answered my questions.

As for the informants, I previously did not know how I came across, whether as trustworthy and open-minded, could have affected their responses. Having the interviewer present, can make the informant conscious not exposing themselves in a negative light (Johannessen, Christoffersen, and Tufte 2011, 424).

I found it hard to test the reliability of my data, but to strengthen it, I made sure all my informants were informed about what I wanted, what data I wanted to collect, and how I would keep their anonymity. They received some information about my project and also an information leaflet (see appendix 2) in advance by e-mail, and then again during the interview, when I also asked them if they had any questions before signing the consent form. I also ended all my interviews asking them again if they had been able to say all that they had wanted to.

4.8.2 Validity

Concerning the validity of my project, an issue is how representative can a selection of 5 informants and a pilot-informant be. I wanted to talk to researchers from the social sciences, but since it turned out to be more difficult than I had initially thought to recruit informants, I had to broaden my search and also ended up with one informant from the natural sciences. I still believe, however, that my data from these projects crystallized into some common features of management and leadership, or the lack thereof.

One of the dangers with my limited material is "anecdotialism" — that is, trying to create a pattern from a few instances of a phenomenon (Braun and Clarke 2006). There was never a possibility that any phenomenon would appear several times in my material, so this was a delimitation I had to take into consideration while doing my analysis and making my conclusions. I also had to try to anchor the analytical claim in my theoretical framework at all time and to keep the “interpretative power beyond mere description” (Braun and Clarke 2006, 97).

My data consist only of what the informants told me about their perceived actions as coordinators of international collaborative research projects, but I felt they had a sincere approach to my questions. Having only a few informants talking about their own perceptions

of their leadership style is a weakness, as there is no way, without interviewing more members and partners in the projects, I could not be sure that they did not have misconceptions of their own leadership.

As for the research's generality, in terms of drawing conclusions and developing theories and concepts (Johannessen, Christoffersen, and Tufte 2011), I hope my findings can be used in other types of collaborations or even in other collaborative research projects. In addition, there is the fact that my interviews were done only in Norway, which has a particular leadership style. Indeed, the Scandinavian leadership style is known to be less hierarchical than in many other countries, which may affect how my informants reported on their style. I do believe that at least some of the concerns my informants had, and how they did or did no address them, can be relatable for many coordinators of similar collaborative projects.

5 Empirical data

As described in the section about the informants, I interviewed two scientific project managers, two project managers, and one scientific coordinator. Table 2 is an overview of their experience and background.

Table 2— The informants' experience and background

Informant	**Education level**	**EU experience**	**Former leadership experience**
Project manager one	Master's degree	Partner in four to five projects	Head of office
Project manager two	Master's degree	Coordinator in four projects	Head of marketing, chief of tourism
Scientific project manager one	Professor	Work package leader, member of a COST network	Manager of research group
Scientific project manager two	PhD	Coordinator in two projects, partner in nine projects	Project manager
Scientific coordinator one	Professor	Coordinator in two projects, partner in a few more,	Research director
Scientific coordinator — pilot	Professor	Coordinator of two proposal	Head of refugee office

5.1 Leadership and management

5.1.1 Leadership

I initially wanted to find out how the informants looked at their own leadership. I wondered if there were some differences between the three types of informants: the project manager, the scientific coordinator, and the scientific project manager.

I started out by asking the informants about their thoughts about leadership and their style of leadership in the collaborative context.

None of my informants reported to have a clear leadership philosophy, but the common feedback was that they could not be "overly democratic" and they had to keep a firm hand. One informant said that it is important to have an experienced leader with clear direction.

Leadership should be based on trust, as leaders must disseminate the expectations from the coordinator and the work package leaders to the partners. One informant said the partners might have thought that the scientific coordinator was something of a dictator. Another informant, the scientific project manager from the natural sciences, reported that her leadership style included "clear instructions" with "few e-mails," as she had "no time to discuss everything."

Most of the informants said that being a coordinator for these collaborative research projects demanded them to take a stricter and firmer approach than they naturally would. One informant said that "Norwegians are dialog oriented" and that she "had to show more authority as a Norwegian." One informant even said partners had told her that she had to step up and get a hand on the steering wheel. The scientific coordinator said she found it somewhat ridiculous that she had to be so strict, as she felt it was a contradiction: she had to be strict but also keep the researcher's interest and commitment and let them feel what they are doing is important. As an informant said, "It is about leadership but also project design"

All the informants reported that cultural differences affected how they handled leadership and management. Having many partners from many countries and from different organizations means having different personalities, different ways of handling commitments, and different research approaches. Different partners may do things differently, so managers must keep an overview. As one coordinator said, "There are countries participating which are at times extremely different, and we needed to use a lot of time on background info." One scientific coordinator also said this about the actual scientific work; the participants had to get to know the societal conditions in each country to develop interview guides.

One informant emphasized the cultural aspect of leading the collaborative research project; she said you had to act differently with different people. Having many different cultures in the projects means articulating instructions very clearly. In discussions, managers must be attentive and respect different opinions, but there will be no new discussion after an issue is settled: "We will do it the way we agreed upon now. Full stop."

The two scientific coordinators said that they like to support the researchers in what they do best. One of them said, "Researchers are a bit like cats: they do what they do and they do it well, but you can't herd them." When I asked her how it ended up being in practice, she said that there had to be some instructions and that she had to keep the partners in line with the

project and its concept. The scientific coordinator owns the project and must have the last word in any argument. One project manager described her leadership style as the following: "You have to let the thousands of flowers blossom, but somebody has to take the command to prevent chaos."

One project manager described that her approach changed throughout the life course of the project. At the proposal stage, people have their own agendas, and managers have to be a little dictatorial, even when communicating with other people. At the implementation stage, managers want to encourage partners and follow up with them; there is now a plan everybody has signed off on, and to which they are now accountable. In addition, one scientific coordinator stressed the need to encourage people and cheer them along.

5.1.2 Steering

I have through my theory tried to distinguish between leadership and steering. When I coded my material, I tried to divide my informants' answers between the codes "leadership" and "steering."

I asked my informants about management, leadership, and steering, and they all stressed the need to hold all the partners to their promised tasks, which requires that the project is well planned and each partner has a role to play.

As one scientific coordinator said, "The project was not an open brainstorming process where everybody was invited to bring their ideas; it was more of a take it or leave it situation. They had to do what they promised." This informant said it was her experience that strong management is required to make the project work; in addition, the administrative project manager reminded people of deadlines and kept the project in the minds of everyone involved.

As for consortium building, the informants said that they took on the role as coordinator because they wanted to pursue either their own personal research interests or their institution's interests. They created the budget according to actual work packages and deliverables, and even if the budget always had some room for negotiation, they kept a firm hand on it. They all were clear that the funds must follow the actual work.

One of the scientific project managers said both the project description and the agreements are important tools for managing the partners because they can be held accountable and deliver what they promised. There is no such thing as "free funding"; these projects must deliver

what the EU agreed to fund. A scientific coordinator said the formalization of the project through consortium agreements with all the partners is an important part of the steering. They all seem to use the agreements actively; the two project managers told me about partners trying to get extensions on their report deadline, and they told them "no, this will affect the whole project." They had to keep to the agreement. A project manager said it is important to be ahead at all times; before consortium meetings, managers had to go through all the tasks and make sure everybody kept focus. She further said they would check and redistribute funds if needed during the project. A scientific coordinator told me that in previous projects, she had tried to appeal to people's bad conscience, but this did not work too well when managing the project. Therefore, having the agreements and keeping focus on them, with the possibility to exclude a partner as a last consequence, are an advantage.

The projects all had a form of a committee — a steering committee, management committee, or technical committee — where some of the partners, often the work package leaders, had a seat. Even the scientific project manager from the hard sciences who said that there was little time to discuss everything had a technical committee with her where she could strengthen her decisions. In the committee, everybody had to show their deliverables and report on their progress. Yet the other scientific project manager said that she sometimes had to accept deliverables being subpar, so long as they were acceptable for the EC. One project manager said everybody was included in their committee meetings; no one was left out.

One scientific coordinator and one scientific project manager said they would have liked to have more capacity and resources to follow up with each partner and work package in more detail. The scientific project manager also said she would have liked to be able to travel and visit all the partners, get to know them, and follow up with them at their workplace.

In their answers, the project managers focused on routines, reporting, and deliverables. One project manager told me that she had created routines and tools to make sure the partners could deliver what they promised: "Some partners do not understand the extent of the actual work before the implantation." Another informant said that due to people pursuing their own agendas, she had to ensure that people did what was most important for the project.

5.1.3 Dual management

I asked all the informants about dual management, as there are a lot of reporting and other administrative deliverables in the collaborative research projects in the framework programmes.

The project managers praised their scientific coordinators and called them competent and professional. One project manager said that the scientific coordinator was strong, which was important, as “with strong partners pursuing their own interests it could have gone in any direction.” One project manager said it is more and more complicated to coordinate EU projects, and it is necessary to have experience, as it also makes it easier to take on new projects. Experience is an advantage, especially when both the project manager and the scientific coordinator are experienced.

The institutes where the project managers work have a model of dual management in their EU projects with a clear division of tasks. They both reported that being close, preferably in the same building, to the scientific coordinator is an advantage to solve management issues. The extent to which the scientific coordinator has an interest or wants to take part in administrative tasks often varies. One of the project managers also contributed to the more scientific tasks, such as drafting reports or policy briefs for the work packages.

The pilot-informant, who is a scientific coordinator, also said it was great having a project manager. It was a very experienced adviser, and without her, it would have been chaos. “You need both chaos and order,” she said, and it was a lot easier having two people covering everything in the proposal process.

One scientific coordinator said she had a project manager with her in both projects she led. She said that the cooperation with the project manager was crucial when having other tasks than just the EU project. It was important to her that someone took care of the deliverables, reporting, reminders, and deadlines.

The scientific project managers both reported having a hands-on approach to the administrative parts of the projects. One said she took on many of the tasks, and it made her study the framework programs and the guidelines of the bureaucracy. She had an assistant with her, who had a PhD within the same field and dealt with some of the administration, but she took care of most of it herself. However, without the assistant, she said, *"I would have broken my neck."* The other scientific project manager used a central R&D office within her institution to support her project, but she had little experience with EU projects. Her institution did not have any experience with EU projects either, so they had to figure out things together. She said she spent a lot of time getting a grasp of everything. Her belief was

that the scientific coordinator cannot tune out of the administrative tasks, and she even called such tuning out a risk factor.

5.1.4 Decision-making

All the informants, except one, said they made decisions with their project manager or scientific coordinator, or they had a steering committee to anchor their decisions. However, it turned out that also the exception had a technical committee including a third of the partners, which she discussed important issues with. Within the committee, she entrenched her decisions with the support of a "collection of key persons."

A project manager told me that she tried to make democratic decisions and let people speak their minds, but it depended on the case. She thought that some could have seen the scientific coordinator as a dictator at times. All my informants said that the decision-making was more or less grounded with all or some partners but that they had the final word as coordinator.

5.2 Bureaucracy

I went into this project with an expectation that most of my informants would find the overall bureaucracy of EU funded projects overwhelming and rigid, and I expected negative feedback on my questions about this. I asked them how they found the bureaucracy of the EC and the services they provided.

A couple of them did respond that the format of these projects — from proposal, to budgeting and reporting — was rigid and had a lot of administrative guidelines. However, surprisingly, they all said that it worked and they appreciated it. They felt it is well regulated and transparent, and they felt that the detailed structures were well thought through. As one project manager said, "I think the researchers trust the system, in a way, because it is so detailed and independent from individual people. The EC is very bureaucratic but also very well regulated."

One scientific project manager said that the structures worked very well, so except for the lack of information and leadership help, the EC had done well. And the systems were very good for reporting.

A couple of my informants said they wished the EC could have provided more information about leadership; it should have been easier to find someone at the EC to talk about leadership challenges with. None of my informants had found or received any support for the leadership

tasks in their project from the EC. It was a learning by doing process and using skills learned through other projects.

Some informants wished they had someone to talk to about the day-to-day management challenges they faced in their projects, and they wished they had a network of colleagues to discuss these problems with. A project manager said that the EC has very few people compared to the amount of funding they administer; thus, they did not wish to unnecessarily disturb their project officer in the EC.

As for the reporting systems, they all found the participant portal on the EC website, where all the guidelines are found and all reports and deliverables are turned in, to be a good tool. One scientific project manager said that it was rigid and detailed, but she appreciated it. It made everybody follow the same plan, and it helped her enforce a strict regime for her project's progress.

When I asked one project manager about the bureaucracy and the systems, she said ,"I just love working with EU projects!"

5.3 Common aim

The common aim for these collaborative projects was to fulfill the tasks they had promised to do in the project proposal. The vision behind these projects was a product of the coordinators' mind. They all, except one, had a clear vision of what they wanted to do when convening the consortium and had the concepts they wanted to use.

The scientific coordinator, the pilot-scientific coordinator and scientific project managers, all but one, had a clear idea of what they wanted to do in the projects, and they used perspectives and theories developed in other research projects or publications. They were strict on keeping to their concept, and even if they were open to other contributions, they had to be relevant to the initial idea.

When I asked about the interdependence between partners, they all said they included partners who could contribute something to the project that helped execute their idea.

The pilot-scientific coordinator, who did not have a prepared concept for the proposal, thought that the concept and the project could both evolve from within by talking to other members. Her evaluation of this method was that it would have been an easier process for all if she had understood what she wanted to do from the beginning. Moreover, next time, she

would figure out how to solve the project before convening the consortium. In the end, they used concepts and perspectives she had developed before.

The scientific coordinators all reported that they had to keep their concept fresh throughout the project; they never stopped reminding people about the concept and the framework of the project. One of the scientific project managers said, "You as a coordinator, and maybe even you personally, is the only one seeing the whole concept and how the project's parts are linked together."

The project managers also said they had a role in keeping the framework fresh and reminding people that they had to keep within it. "We use a lot of energy on this," one manager said. They facilitated the consortium meetings, coordinated and prepared with the scientific coordinator, and sometimes with the work package leaders, on what to communicate to the partners about what was going on with the project. One informant said, “It is a never-ending task to sell your idea to the partners.”

The informants told me that clarifying expectations and getting on the same page about how to understand the concept of the project was best done in person at the proposal stage. They all stressed that having informal meetings, such as dinners with wine or city excursions, was a good way get to know one another. Meeting in person contributed to creating identity for the project; it also ensured that the project was in a good place and it made it easier to discuss complicated issues.

5.4 Trust

Trust was a word most of my informants used even before I introduced it in the interviews. They talked about trust in relation to many parts of the project.

Even though the informants reported that finding complementary knowledge, or equipment, was important when building their consortium, they also reported to have used their existing networks. They reported that they normally contact people they had worked with in previous settings and had established a sense of trust. After this, they used the snowball method and relied on the extended network to get the partners they needed in the consortium. All the informants talked about trust on when selecting their partners. One reported that she would never include a partner who "suddenly sent us an e-mail" and who they knew nothing about. The scientific coordinator also talked about how trust was important when working with the

proposal because the ideas and concepts could possibly be stolen and used in a competing proposal or setting. “We are in a situation of competition,” said the coordinator.

Two of the informants even reported that the first partners they included were people they knew not only as researchers but also as friends. The informants often used the word “friends” to describe some of their partners.

Trust is important at the consortium convening phase, and getting closer to a proposal, the partners might write letters of intent, but the formalization happens through the consortium agreement when the proposal is approved and granted funding. In that case, the coordinator will be in charge of making sure they all sign the grant agreement with the EU as well as the consortium agreement with one another. This formalization gives the coordinator something more than trust to hold the partner to and at least some opportunities for sanctions. The partners are all individually responsible to the EU for their part of the budget and for the tasks they are committed to, but as the coordinators are the one actually coordinating, gathering financial statements, and reporting progress to the EC, they all feel somewhat responsible. As a project manager said, “Each partner is responsible for their budget and their deliverables, but it is our reputation as a coordinator on the line.”

The coordinators, especially the project managers and the scientific project managers, used the regulatory framework to hold the partners to their commitments, as they said, "You cannot depend completely on trust."

All the informants said that they could not trust all partners to fulfill their commitments and tasks in the collaboration without keeping an eye on them and sending them reminders. As one informant said, "You need to trust your partners, but not too much. You need to have a systematic distrust." Her experience was that people will not remember what their deliverables are, they will not provide the report on time without reminders, and they will not necessarily want to do what was agreed upon. Some researchers and professors wanted to go their own way and pursue their own interests. They committed to the project and the proposal and they signed the consortium agreement, but years may go by between when the proposal was written and when the task was to be executed, and in the interim, their interests might have shifted.

All the informants talked about the significance of having social events or gatherings as part of both the proposal and implementation process. Some said it was more important in the

proposal process, but they also appreciated it during the implementation. Some felt these events were important because they allowed participants to get to know one another. As one participant said, “It is easier to take on the scientific discussions when you have seen people from their human sides.”

5.5 Conflicts

Before describing my empirical data on conflicts, I want share a quote from one of my scientific project managers: "You can't think that you can lead such large projects with so many different partners and avoid conflict."

All the informants reported to have had conflicts on some level — from the expected ones, such as scientific disagreements, to more serious ones, where they had to expel partners from the collaborative.

5.5.1 Conflicts over project content

All partners had their own interests they wanted to pursue. Some even wanted to pursue their interest in taking on the management from the very start of the collaboration process — the consortium building. One scientific coordinator said she had to struggle to coordinate one of the projects.

All the informants reported that some scientists pursued their own agendas within the projects. Some partners had undercurrents of "I know better" even though they were not the coordinator and leader, and my informants felt that some strong people would have grabbed power if they could. There were other quarrels about the budget and some about the deliverables, as some researchers tried to fit their agenda within the project.

One scientific project manager told me that, at times, she made a conscious choice not to report when she was unsatisfied with a certain issue just to avoid conflict. If the EC approve it as a deliverable, she tried to think it was good enough, even if she was not personally satisfied.

One informant said that researchers were always improvising within their project, and some delivered based on their own interests and not the project’s. Indeed, some researchers insisted on doing what they found interesting instead of doing what they had committed to do. One scientific coordinator said, “The fact that somebody was trying to pull us in another direction

was demanding and was with us the whole way." As another scientific project manager said, "I was disappointed in the lack of solidarity with the project."

One project manager told me she once expelled a partner from a project. I did not get any details, but it seemed the partner had not provided deliverables and was not trustworthy.

A scientific coordinator said that some researchers, especially younger ones, were unhappy with strong management of their research time, but, again, some of the informants said that the agreements in place were important to keep people in line.

5.5.2 Scarcity of resources

Several of the informants talked about the scarcity of resources — there was always too little money. This situation often led to arguments about the budget, which can go far into the implementation of the project. The project managers and one of the scientific project managers said they would try to make partners look at the months allocated more than the percentage of the budget because personnel costs vary a lot between European countries, and even more when including partners from for example Africa into the mix. One scientific coordinator said that she once had a potential partner who was so unwilling to compromise or even negotiate on the budget that she had to throw the partner out of the proposal. This partner was not a part of the final proposal to the EU.

5.5.3 External conflicts

As for conflict with people outside of the projects, my informants talked about loyalty to the project and its results.

One of the scientific coordinators also told me that it was important to be seen as a team from the outside: "You need to defend your partners externally, i.e. with the commission, if you have agreed upon something which is criticized. Then you say 'we are behind this.'"

One scientific coordinator told me about a partner institution that published an article without referencing her when it used her data and work from the project. This, she said, was a big no-no in the research community, but she gave them a chance to correct the mistake, which they did. The informant also said this could have been due to an inexperienced young researcher or differences in what was considered good referencing practice in this particular country.

6 Analysis

As argued in my theory, the collaborative research setting is a paradox, and my empirical data seem to support this various ways. In the following section, I will explore what my data say about the tension and the paradoxes within management, especially how the informants handle the strong partner, the bureaucracy paradox, and the cultural paradox. In addition, I will see whether the division of work in dual management influences the leadership style or not.

6.1 Stability

The informants like to take control from the very beginning of convening the consortium, and as Røiseland and Vabo (2012) said, choosing the participants in the consortium can be seen as a kind of steering. Convening their consortium, the coordinators will depend a great deal on trust. When choosing their partners, they go for partners they know, and as for bringing in new ones, they are skeptical; at the very least, they want references from people they know. They like to think they all have a fundamental trust in their partners; as one said, "you have a basic trust that we are not in this to cheat on each other." They share their ideas with each other in a situation that is quite competitive, which is rather paradoxical, since researchers are both cooperating and competing at the same time, as in Ernø-Kjølhede's list (2000). The way they convene their partners based on trust can also be a sign of seeking stability for the project from the beginning without other measures to do so. According to Provan and Kenis (2008), long-term relationships with some other members will maximize network outcomes, as they understand one another's strengths and weaknesses.

Huxham and Vangen (2005, 32) draw the following conclusion: "the motivations of each for involvement in a collaboration are necessarily going to be different from each other." This is a reasonable assumption, and one every coordinator needs to take into consideration. By choosing their partners carefully, the coordinators try to make their consortium more able to reach its aims and to be more stable.

The tension between stability and flexibility is, at least to some extent, addressed by using trust, especially at the proposal stage. Whether this makes the consortium more effective cannot be measured with my data. Provan and Kenis argue a formal hierarchy is the most obvious option to maintain stability. There is a hierarchy in these EU funded projects, which is formed by the project description and the consortium agreement; work package one is management, described with the coordinator on top, even if the actual structure with

autonomous organizations is not hierarchical. This way the consortium is set up can also have an effect on how the participants see the coordinator.

The trust issue recurred on many levels during the interview, not just about building the consortium but also about other matters, including the reputation of the coordinator, the responsibilities of the consortium to the commission, and the deliverables throughout the project.

The level of trust seems to change somewhat through the consortium's lifetime, from the proposal to the final report. In the initial stages, finding and convening the consortium and writing a proposal, all participants need to have a lot of trust in one another. There are no written agreements; they may know each other, personally or by reputation, and they sit down to create a proposal. They have to exchange their ideas in a secretive manner, and they often use "confidential" as a watermark on their drafts, but they still have to trust that no one will take the idea outside the consortium and use it in a competing consortium or business.

All the informants were committed to making sure all consortium members meet throughout the project to build trust, which was how some of them ended up in the same consortium. They met in various settings before and learned about one another as persons and scientists; they sought trust, which can improve the stability of any network.

To build stability and trust among partners, both the organic leaders and the neutral facilitators will at the proposal stage use a combination of stewards and catalysts. The steward role is when the scientific coordinator lends her scientific capital to convene the consortium and the project manager is being a steward by creating ground rules. The scientific managers and organic leaders will also try to mobilize the partners to pursue value-creating opportunities (Ansell and Gash 2012) and to make them see the benefits of being in and contributing to the consortium.

In the following, I will look into other steering instruments that are more connected to classical management styles, but which I assume are part of building stability.

6.2 Leadership, steering, and the handling of paradoxes

6.2.1 Managing the strong partner

One of my initial hypotheses was that the management of collaborative research projects must be based on negotiations and some kind of democratic approach; the theories of facilitative management support this.

There is a large grey area between leadership and management in the reports from my informants. What struck me early on was that there were some differences, but also some similarities, between the three types of informants: the project manager, the scientific coordinator, and the scientific project manager. All the coordinators wanted to have a democratic approach; they wanted the partners to have an opportunity to be heard, and they wanted to respect everybody's opinions. But at the end, the scientific coordinator, more than the project manager, had the final word: "We will run it in the way we decided now. Full stop … Other decisions could also be right, but now we'll do it this way." The scientific coordinators and the scientific project managers talked about facilitating the project through supporting and stimulating people to know what they do best, but they always made sure they made the final decision.

I find the paradox of the needed strong partner but one who pursues her own interests as well as the paradox of the predictability of the project output versus the unpredictability of the research outcome to be intertwined in my data. In my interviews, I could clearly see the traces of my informants' struggle to find a balance in their leadership style. On the one hand, they wanted to let the highly competent academics, who are their partners in the collaborative research projects, do their job and to make sure they felt included. On the other, they wanted to make sure that they got the most out of the academics that they, the coordinators, could deliver what they promised within the timeframe specified. They made active use of the steering tool agreements.

One of the scientific project managers said everyone had to show her all the deliverables and they had to keep to her standards, which is quite authoritative. However, the other scientific project manager said she would sometime let a deliverable be sent through to the EC if the EC would approve it, even if it was below her standards. This way of handling the balance between being an instructive leader and a team player seems to be closer to the mediator role in terms of restoring the process to a positive interaction. Yet the scientific project manager wished she had more time to travel to her partners to get to know them and each single work

package better. This could be seen as a sign of a need for control but also as a trust building measure.

One of the scientific project managers said the following about management: "It's a matter of leadership but also project design. Those two are connected." Project design can also be seen as a form of steering. I think that the more the concept, idea, and project design are connected with a strong leader, the less leeway there is for the other partners to contribute or find their own way. All the informants said that it was crucial that the project was well planned, and even if this was during the development stage, when the partners were included, it is fair to conclude, based on my interviews, that they still kept their partners in line with the plan. It is hard to categorize this reality within the theory of Ansell and Gash, but I see it as a factor of steering. When strong partners pull the project in their own direction, it is important to have a clear concept and a plan to keep them in line.

However, during implementation, the consortium has agreements and the formalized steering seems stronger, as the trust they lean on at the proposal stage has clear steering. The project managers still want to appear to be the mediator and try to make their controlling activities seem more like support. It seems that they are quite aware of the situation they are in and that they need to make sure the partners keep their willingness to contribute to the project. They know how the prima donnas have more loyalty to their research than their employer, or in this case, the formalized project, so they have to approach them with this in mind. It can seem they are using techniques from facilitative management to enable the stricter and more traditional management through steering. They want to make sure the partners deliver and that they want to deliver.

It can seem that the project managers especially deal with the paradoxes of predictability in the project output (Ernø-Kjølhede 2000), as they implement strict reporting and frequent reminders. This is a marker of more steering than leading. The scientific coordinators wanted to have a more democratic approach to the discussions; they wanted everyone to be heard, but they still made the final call on what was relevant for the project. All the informants, even if they reportedly had systems and ways of following up with the partners, also wanted to cheer people on and keep them responsible without being seen as a controlling. They felt the paradox of their partners' strong steering, but they wanted to at least make it *seem* like less controlling.

The informants provided several examples of partners pursuing their own interests, and they dealt with them in various ways. I wondered if they could use budget allocation as a way to please a strong partner. Talking to my informants, I realized that too little money is an issue in all projects, which is something they have to deal with. Thus, managers do not spend money in this way and will keep the budget in line with the actual work. Still, one informant said they might give a little to keep them within the project and have them work more on the core of the project's concept, which is a trace of facilitative management. The coordinators said they spent a lot of time justifying and explaining the budget, but budget quarrels could, in some cases, go into the implementation phase. One scientific coordinator told me that she once had a possible partner disagreeing with her about how much work the partner should do and the budget allocation, so the coordinator expelled the partner from the proposal process. This is a clear example of using strong steering, which was possibly enabled by the way this consortium was set up — the coordinator had the main power in it. As my informants said, conflicts are expected in collaborative research projects, but the severity may vary from harmless ones to those that break the consortium agreements and stretch the coordinator's patience to its limit. But it does not seem that the coordinators feared a certain level of conflict.

In terms of scientific issues, the scientific coordinators were strict about keeping their concept, even if others wanted to change it. They were more willing to let people in if they could contribute something to the original idea, not if they wanted to change it. The informants let people be heard, but they still made the final decisions, which was clearly a sign of a traditional hierarchical leader. They may use facilitative roles to see if they can make the partners generate ideas beneficial to the project or the mediator role to facilitate the discussions in a democratic way, but in the end, the classic leader still comes through. The informants had various ways of dealing with conflict, throwing somebody out of the collaborative seemed to be last resort. One scientific project manager said, "You can't have the same mutual benefit with all partners." Thus, they seemed to let some issues go in order to benefit the collaborative as a whole.

My informants solved their management problems by taking on various roles, but they all said they had to be stricter and more authoritative than they initially thought or even felt comfortable with. The project managers took on the role as mediator and tried to keep the project as free of conflict as possible by communicating and making people stick to their

consortium agreement. The scientific managers were more likely to try to be a combination of a mediator, where they moving difficult processes forward, and a catalyst, where they drew on contextual knowledge to make the consortium act catalytically. Other times the coordinators had to take on an authoritative style but only after trying softer measures. They did not toss somebody out of the collaborative as their first measure.

6.2.2 Management and bureaucracy

The system, templates, and regulations from the EC support the coordinators in their job. As one coordinator said, "It made everybody follow the plan or make an amendment. It made it easier to keep to a strict regime for the progress". Another project manager said "The EU has done well; they have good systems for reporting." These templates and regulations can easily be seen as classical management instruments, enabling them to steer through various means — sanctions, for example. However, as one informant said, these systems are designed to steer, not to lead.

I made the assumption that there is a paradox in having a large bureaucracy behind the collaborative research project, as bureaucracy is usually connected to classical steering instruments and the convened members of the projects are autonomous institutions with researchers valuing their autonomy as scientists. The question is what this bureaucracy does to the coordinators' space for leadership. None of the informants expressed anything solely negative about it. One coordinator pointed out that bureaucracy is more management than leadership, but I did sense any negative reflections about this. The project managers went the furthest in praising the system. One coordinator said, "I just love working with EU projects" when I asked her a question about whether or not the system was too rigid.

However, some of the informants requested more guidance on leadership as part of management, and I wondered if such guidance could have been provided by the funder. Regarding the EU structure and other structures that might limit the coordinators' ability to lead, I think there are at least two sides to this. All the informants praised the structures they were given, as they helped organize their management approach. A couple of my informants raised the issue that these structures were rigid and demanding, but they still saw them as contributing in a positive way. Yet these structures of the consortium could enable the coordinators to lead. If they did not have the instruments to steer, maybe there would be no room left to lead. As the traditional management theories argue, leadership and steering

depend on each other, but it is maybe more difficult to pursue a facilitative management style, at least a pure version, since steering will impose a more traditional leadership style.

Sissel Hovik (2018) has said there is usually some kind of operative leader and a steering group in formalized collaborations, and all the projects of my informants had a steering, technical, or management committee. These management committees can be seen as a democratic approach to management, as it divides power between more people. These committees can also be a sign of catalyst behavior, as they mobilize stakeholders to pursue value-creating opportunities and frame and reframe problems (Ansell and Gash 2012). I believe such committees can also be seen as a steering tool and part of building a more traditional hierarchy in a bureaucratic sense. The coordinators gather people to discuss and entrench decisions, so they have core personnel and key people, as work package leaders, in line when communicating decisions to the remaining partners. However, my informants reported differently on the use of a committee. As previously said, the scientific project manager from the natural sciences said all deliverables had to go through her and/or her committee for approval. Another informant said everyone was included in the committee meetings; it was just a part of the overall consortium meeting, which seemed like a very democratic approach, so this is not a one-sided issue.

The fact that these projects have templates as well as demands to make a consortium agreement between the partners is also linked to the EU bureaucracy, but it is also a tool that the informants said they appreciated having. The coordinators used the agreements actively to manage their partners.

6.2.3 Cultural paradox

One project manager said it was important to have an experienced leader with a clear direction — a type of steward role. However, she also said it was important to base leadership on trust and to disseminate the expectations from the coordinator to the partners, which I think easily can be seen as a mediator role. When I discussed the cultural paradox with the informants, they reported that they spent a lot of time dealing with these kinds of issues.

One of the scientific coordinators said that the countries represented in the project are extremely different and she as the coordinator had to use a lot of time researching background information, since there are many different personalities and cultural, or even scientific, backgrounds, and everyone needs to be on the same page. This can be seen as a mediator role

for both the administrative and the scientific coordinators; they have to use their communication and negotiation skills, and for the scientific leaders, they have to add their context-specific knowledge (Ansell and Gash 2012). As a scientific project manager said, "You need to act differently with different people." These leaders had to be attentive and respect different opinions, but they also had to be strong and settle discussions.

A couple of the coordinators said they had been able to visit the partners to get to know them better, which is a way to try to handle the issues around cultural differences. It could either be seen as a measure of good faith — that is, learning to trust these partners more and giving them more freedom — or as a measure of gaining control.

The fact that a couple of the informants were asked to step up and grab the steering wheel can also be seen as a cultural factor. Partners from other countries could expect more steering from a leader, but this is something I do not have data on.

6.3 The dual management

The dual management seemed to be a model that worked very well for the scientific coordinators who had a project manager with them. They praised their administrative counterpart and said it would have been almost impossible to take on the task as a coordinator without someone taking care of the administrative part of the coordination. The scientific coordinator seemed willing to let go of the control of certain parts of the project, and one project manager even contributed drafts for the scientific deliverables and policy briefs. The project managers also reported that the cooperation worked well; they got to manage the parts they controlled. As one of the project managers said, "I think our partners saw us as a team. We have even been asked to be coordinators again as a team."

The description of the project managers made by the scientific coordinators was that they were an important part of the management, as they kept to the deadlines. The project managers themselves said it was important to be ahead of schedule and prepared at all times. This approach to management can be interpreted as a steward or a mediator role, depending on whether the focus is on the processing of ground rules or communication skills. But it could also be an example of steering management, as they try to keep people in line.

The project manager kept track of the budget and redistributed funds between partners if needed during the project and had a clear sense of having an administrative responsibility.

The scientific project managers did not think about dissemination to the same degree; they chose not to use energy on this. This is an area with differences between the unilateral and the dual leadership models. The scientific project managers often discussed how much work was involved in administration; as one manager said, "you could break your neck on these projects without sufficient administrative support." Balancing between a neutral facilitator and an organic leader can be too difficult at times, and a manager must choose where to focus. It is hard to see this approach as having a similar aim as the facilitative role; it has more in common with the steering tool for consortium building, proposal writing, and project implementation. The steering role is combined with the steward one, as the scientific manager invests the reputation and social capital, and the catalyst mobilizes stakeholders to pursue value-creating opportunities. The project manager plays the role of a steward, as well as that of a mediator, and attempts to lay down ground rules while being the “honest broker” (Ansell and Gash 2012) through using their sophisticated communication and negotiation skills.

The scientific coordinators, who worked with project managers, did fewer administrative tasks related to the bureaucracy of the EU projects than the scientific project managers did. The scientific managers spent much more time finding and receiving all the projects’ guidelines; they had a very hands-on approach to the entire project, not just the scientific part. One said it would be a risk to ignore the administrative side of the project. They had a larger need to control every aspect of their projects. It turned out that both scientific project managers had administrative support to some degree; one had an assistant, who handled many of the administrative tasks, and one had regular research support services at her place of work. The scientific coordinators enjoyed having someone else managing timeframes, deadlines, and the organization of events and meetings, which made it seem they had less need for control of all aspects.

Thus, I think the two styles from Ansell and Gash’s framework, neutral facilitator and organic leader, align nicely to the project manager and the scientific coordinator — the project manager falls into the style of the neutral facilitator, and the scientific coordinator falls into the style of the organic leader.

For the scientific project managers, their styles seem more fluid. Taking on the role of the coordinator by themselves leaves them with many administrative tasks and challenges they have to solve themselves. Either they move between being a neutral facilitator or an organic leader, or they take on a more authoritative leadership style to keep control of the project. As

mentioned above, neither of the scientific project managers could do without administrative services; one had a secretary in addition to her research team and financial accounting support, whereas the other had a R&D department and regular administrative support, which was provided to all researchers in her place of work.

7 Methodological Discussion

After my interviews and my analysis, I have a few thoughts about the data.

I could have taken many different paths to find markers of management and leadership in collaborative research projects. One very interesting path would have been to look into cultural differences or to look into the strategic work and choices within the organizations pursuing H2020 projects. I chose not look into these aspects of the projects so that I could concentrate on the theories in use. Including large amounts of theory on culture and strategy would no doubt have been interesting, but it would have also been unmanageable for this relatively short thesis.

As I had one informant from the natural sciences, with the others being from the social sciences, I wondered if there were some cultural differences that could have contributed to some differences in my data. I wanted to do a strategic recruitment of my informants, but as I had trouble getting the informants I wanted from the social sciences, I had to broaden my search. Thus, since my informants were from different sciences, which potentially different scientific cultures, I wondered if this might have affected my informant's answers.

All but one informant had previous experience with formal leadership, including being responsible for employees, but all had former experience in project management. The effect this had on their management style in these projects is hard to say. They all seemed to have a learning by doing approach, yet some of them also referenced other project managers' way of handling things. They also discussed examples of how they had done things, which led them to not do things in that way again. This leads me back to one of the weaknesses of this particular way to investigate my research question: I only know what the coordinators told me, and it may be correct, but it also may not be.

It would have been interesting to take into consideration what kind of partners the informants had, such as it they were from other research entities, SMEs, or NGOs, but I have no data on this.

As mentioned above, I was concerned I was too close to some of the subjects, since I had previously worked with them in previous capacity. I had to free myself from some of my prejudice concerning the EU bureaucracy and what kind of leadership style I came to think may work. I hope I had an open mind and that these past relationships did not affect the outcome of this analysis to a large degree.

I have also made a phenomena from few instances, which is a limitation of this research.

8 Conclusion

Ansell and Gash's theory about facilitative management seems a bit limiting in explaining how coordinators in international collaborative research projects report their own leadership style and management. Provan and Kenis have said that "There seems to be some reluctance among many who study networks to discuss formal mechanisms of control" (2008, 230).

I found that my project managers are usually closer to what Ansell and Gash call the neutral facilitator, whereas the scientific coordinators were closer to the organic leader, when considering the paradoxes found in collaboration efforts. But the scientific project managers seemed to be somewhere in between; they tried to balance scientific and administrative tasks. As for the steward, mediator and catalyst roles, they seem to follow Ansell and Gash's division, and are quite like they describe; the coordinators will use all the roles at different times and sometimes in combination.

As to how the coordinators' leadership style changes during different stages of the project and when dealing with different problems, my evidence supports the literature. The managers use more trust in the proposal stage than during the implementation stage. I believe this is a measure to keep the proposal and collaboration stable when not having any formal steering tools available. They will hold on to their idea and use the agreements to keep the partners in line when the funding is granted and the agreements are put in place. As I wrote in my introduction, these tools are given by the framework programmes, and there is little focus on people management and a lot on steering.

Regarding the EU structure and other structures limiting the coordinators ability to lead, I think there are at least two sides to this. All the informants praised the structures they were given, which they thought helped them structure their management style. A couple of the informants did think the structures were too rigid and demanding, but still felt they contributed in a positive way. But the fact that these structures were steering more than leadership focused makes me think that these structures do, in fact, limit the coordinators ability to lead, but it is hard to be sure if more leadership and less steering would be better for these projects, which is something for future research to concentrate on. Overall, though, steering seemed to function well for my informants.

The formalization of the projects within the European framework programmes was stronger than it seemed at the first glance and the project managers can sometimes act like the

personification of steering. Perhaps, though, these structures also prevent trust building. Indeed, the managers could have spent more time building trust and common ground, but the structures made this unnecessary. Yet these structures might have also prevented larger trust issues and conflicts from arising, including mistakes from coordinators new to collaboration.

Whether more leadership and less steering would be better for these projects is something for future research to decide. For my informants, steering functioned well.

However, taking into consideration that all my informants are from Norwegian institutions with Scandinavian backgrounds, it could be a factor that Norwegian work-life balance is more egalitarian and the leadership style is known to be more democratic. Thus, the informants might have seen themselves as more rigid and authoritative than their international partners did. If the latter explanation is indeed true, then the theory about facilitative management seems more applicable. But one could also look at it the other way around: the egalitarian leadership style known to Scandinavia could also be why the coordinators took on a facilitative leadership style. They used it to make the more authoritative styles weaker. Therefore, my hypothesis that the management of research collaboration must be based on a facilitative leadership style seems to be correct, yet my informants also took on, at time, a more authoritative style. This factor leads me to think that my other hypothesis, which states an authoritative leadership style will not work, is not entirely correct. This could be further explored in a larger research project that investigates many more projects from different countries in order to understand what the actual differences are.

The coordination in these collaborative research projects worked out well for my informants. None of them experienced a disaster, even if a couple of them said they could have had more impact or could have exploited the data more after the project, if there had been more money to pursue this. It can also seem like having a dual management is the key to be able to focus sufficiently on both the administrative and the scientific parts of the projects. There were signs that the coordinators acting alone had to narrow their focus and be even more controlling. For all informants, it seems that the structures kept them from failing; however, my small group of informants may not be the key to understanding how management is conducted in every project.

One question that remains unanswered is whether the way the coordinators convene their projects limits interdisciplinary research. They seemed to have based their consortium mainly

on existing networks for the sake of predictability and stability, but it is a conservative choice. Could a hidden cost of this decision be less research and innovation? Could they simply be reproducing knowledge? And how through this decision do they help support new researchers? I think this could be an interesting topic to look at in further research — the implication of coordinators choosing their partners more freely.

As for the internal structures within the coordinators' institution and the administrative support they receive, my data turned out to be scarce: I did not have enough data to analyze anything in particular. I do believe there is a willingness (and pressure) to take on EU funded projects, but the support system, knowledge, and experience vary.

I believe the management of these projects is more important than it appears to be, and I do believe that the EU, the institutions, and the RCN should take the project managers' leadership challenges seriously and make sure they have somewhere to turn to get advice and help. The projects are filled with challenges and paradoxes, some of which are new to coordinators who only have experience working on Norwegian projects. But as the RCN moves closer to the European research programmes in format, management will, more and more, become a factor to consider.

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Appendices

Appendix 1: Interview guide

Appendix 2: Information leaflet and consent form

Appendix 3: Notification form to NSD

Appendix 4: Approval from NSD

INTERVIEW GUIDE – project manager/scientific coordinator

Master Programme in Public Management – MLS 5900

How to Manage International collaborative Research Projects

May-Lill Skogli

Contents

1. Background information and intro questions

1.1 What is your highest completed education?

1.2 How many EC funded projects have you participated in?

- How many as a project manager?
- How many as a scientific coordinator with a project manager in addition?

1.3 From which programmes have the projects been granted funding?

1.4 Do you have any managerial experience outside of EC funded projects?

- If yes, what kind of managerial experience?

2. Consortium building

2.1 What are the main reason(s) you wanted to gather a consortium/create a collaborative research project for your research?

2.2 How did you create your consortium/-a?

2.3 How did you end up as the coordinator? Did any of the other partners want to coordinate?

2.4 Was there a thought about the opportunity to exchange resources between the institutions?

2.5 Was there a notion of interdependence between the partners? In what way?

2.6 Did you through negotations in the collaboration give extra resource to other partners/stakeholders, for example funds, on your own/your organization's expense, to help the collaborative as a whole?

3. Leadership

Leadership

3.1 When you think about the word "leadership", what comes to mind?

3.2 In the setting of the collaborative research project, how would you describe you style of leadership?

3.3 Did anything surprise you in talking on the manager/leader of collaborative research project for the first time?

Strategies

3.4 Did you analyze potential challenges regarding the management of your project ahead?

3.5 Which management strategies did you apply to develop common ground in the project?

3.6 How did you negotiate shared purposes for the project? Did you try to disseminate the values of the project to your partners?

3.7 Did you find it easy to work together and lead the team toward joint aims or were there conflicts of interest?

3.8 How did you delegate work to your team?

3.9 Did you find that having common tasks helped the cooperation?

Decision-making

3.10 Which approach did you use in decision-making?

3.11 Did you ever feel the need to make unilateral decisions and did you? How did that go?

Trust

3.12 To what degree did trust guide you in your leadership? Did you find your partners to be autonomous in their work?

3.13 How did you find the exchange of knowledge in the consortium and with stakeholders?

3.14 In what way did you create common rules in the project?

3.15 Have you experienced disagreements or conflicts between partners/stakeholders? How did you deal with that?

3.16 How did the conflicts affect the trust within the collaborative project?

After the project

3.17 How did the cooperation with the project manager/scientific coordinator go?

3.18 Did you feel like you had to nurture you partners to make the collaboration work?

3.19 Do you know how your partners felt about your management/leadership?

3.20 What could have made collaboration work better?

3.21 How do you think your leadership style influenced the outcome of the collaboration/project?

3.22 If you have been a leader outside a collaborative project – how was this different?

4. Framework Programme structures

4.1 Which, if any, of the available resources in the EC system did you use, for example the participant portal, in managing you project?

4.2 How did you find the structure of the framework programmes, in terms of reporting, contact with the project/programme officer in EC DG Research?

4.3 How did you find the steering of the project from the EC?

4.4 Did you find anything lacking from the information from the EC?

4.5 Did the structure of these programmes affect your leadership in any way for the worse or for the better, or maybe both? Please elaborate.

5. Internal structure/institution/organization

5.1 Did you get enough administrative support in your project?

If yes – what kind of support, and did this support have an impact on the management of your project? What kind of impact?

If no – what did you miss, and how do you think it would have contributed to the management of your project to have it?

5.2 Did you find any organizational obstacles for you leadership within your own organization or within the partner organizations?

6. Success

6.1 There are many ways to define success, and many different yardsticks to measure it by. How do you define success in terms of an international collaborative research project?

6.2 With that as a back drop, would you say the projects you have managed has been successful?

6.3 How successful was the project in terms of collaboration?

6.6 How successful were the project(-s) in terms of quality, impact and innovation?

6.5 How is the collaborative project an arena for innovation and impact compared to a local, unilateral project?

Vil du delta i forskningsprosjektet

How to Manage International Collaborative Research Projects?

Dette er et spørsmål til deg om å delta i et forskningsprosjekt hvor formålet er å undersøke hvilken type ledelse koordinatorer benytter, og som fungerer i internasjonale forskningsprosjekter. I dette skrivet gir vi deg informasjon om målene for prosjektet og hva deltakelse vil innebære for deg.

Formål
Kravet til deltakelse i internasjonale forskningsprogrammer er økende, og dette medfører at man også må være rustet for oppgaven som koordinator og leder av disse prosjektene. Jeg ønsker i min masteroppgave å undersøke hvilket rom det er for ledelse for koordinator, og hva slags type ledelse passer i slike forskningsprosjekter med mange partnere og forskere fra mange land og ulike typer institusjoner. Jeg ønsker å se dette i sammenheng med hvilken opplevd suksess av prosjektet har koordinatoren når prosjektet er fullført.

Avgrensning
Studien omfatter tidligere koordinatorer/prosjektledere av større internasjonale prosjekter
Oppgaven omfatter ikke koordinatorer av nasjonale prosjekter eller internasjonale prosjekter med færre en fem partnere.

Hvem er ansvarlig for forskningsprosjektet?
OsloMet – storbyuniversitetet som er ansvarlig for prosjektet, som blir skrevet på studiet Master i styring og ledelse. Professor Sissel Hovik er veileder.

Hvorfor får du spørsmål om å delta?
Du ble kontaktet for mulig deltakelse, da du har vært administrativ eller vitenskapelig koordinator i et forskningsprosjekt i et internasjonalt forskningsprogram, som har blitt avsluttet i løpet av de siste 5 år.

Hva innebærer det for deg å delta?
Hvis du velger å delta i prosjektet, innebærer det at du vil bli intervjuet. Det vil ta cirka en time. Svarene vil bli tatt opp på bånd og transkribert. All informasjon og alle svar du avgir vil bli anonymisert i transkripsjonen og i videre bruk.

Det er frivillig å delta
Det er frivillig å delta i prosjektet. Hvis du velger å delta, kan du når som helst trekke samtykke tilbake uten å oppgi noen grunn. Alle opplysninger om deg vil da bli anonymisert. Det vil ikke ha noen negative konsekvenser for deg hvis du ikke vil delta eller senere velger å trekke deg.

Ditt personvern – hvordan vi oppbevarer og bruker dine opplysninger
Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi behandler opplysningene konfidensielt og i samsvar med personvernregelverket.

Notater eller lydopptak som tas i intervjuer som kan identifisere deg som informant vil bli lagret på PC tilknyttet OsloMets server, men filene vil være beskyttet av eget passord som kun oppgavens

forfatter har tilgang til. Informasjonen vil bli anonymisert gjennom en kode som knytter deg til dine opplysninger.

Kun anonymisert informasjon vil bli publisert fra prosjektet, men det vil kunne være mulig å identifisere hvilken rolle informantene har hatt i de undersøkte forskningsprosjektene når oppgaven publiseres.

Forfatteren er databehandlingsansvarlig.

Mulige fordeler og ulemper ved deltakelse
Forfatteren ser ingen spesiell risiko forbundet med å delta i studien. Det gis ingen honorar for deltakelse.

Hva skjer med opplysningene dine når vi avslutter forskningsprosjektet?
Prosjektet skal etter planen avsluttes i mai 2019.

Av kontrollhensyn blir grunnlagsdata oppbevart forsvarlig sikret tom 31.12 2019. Deretter vil data bli slettet.

Dine rettigheter
Så lenge du kan identifiseres i datamaterialet, har du rett til:
- innsyn i hvilke personopplysninger som er registrert om deg,
- å få rettet personopplysninger om deg,
- få slettet personopplysninger om deg,
- få utlevert en kopi av dine personopplysninger (dataportabilitet), og
- å sende klage til personvernombudet eller Datatilsynet om behandlingen av dine personopplysninger.

Hva gir oss rett til å behandle personopplysninger om deg?
Vi behandler opplysninger om deg basert på ditt samtykke.

På oppdrag fra OsloMet - storbyuniversitetet har NSD – Norsk senter for forskningsdata AS vurdert at behandlingen av personopplysninger i dette prosjektet er i samsvar med personvernregelverket.

Hvor kan jeg finne ut mer?
Hvis du har spørsmål til studien, eller ønsker å benytte deg av dine rettigheter, ta kontakt med:
- Student May-Lill Skogli, mlskog@oslomet.no, telefonnummer 40 24 40 28 eller veileder, professor Sissel Hovik, sissho@oslomet.no, telefonnummer 67 23 82 36
- Vårt personvernombud: Ingrid S. Jacobsen, ingridj@oslomet.no eller NSD – Norsk senter for forskningsdata AS, på epost (personvernombudet@nsd.no) eller telefon: 55 58 21 17.

Samtykkeerklæring

.

Jeg har mottatt og forstått informasjon om prosjektet *How to Manage International Collaborative Research Projects* og har fått anledning til å stille spørsmål. Jeg samtykker til:

- ☐ å delta intervju
- ☐ at opplysninger jeg oppgir kan publiseres i anonymisert form.
- ☐ at mine personopplysninger lagres etter prosjektslutt, fram til 31.12.2019, til kontrollformål for masteroppgaven.

Jeg samtykker til at mine opplysninger behandles frem til prosjektet er avsluttet, ca. mai 2019

(Signert av prosjektdeltaker, dato)

NSD NORSK SENTER FOR FORSKNINGSDATA

Notification Form 824869

Last updated

28.01.2019

Which personal data will be processed?

- Name (also with signature/written consent)
- Sound recordings of people
- Background data that can identify a person

Type of data

You have indicated that you will be processing background data that can identify individual persons, describe which

Rolle i forskningsprosjekt (prosjektleder/"scientific coordinator")

Will you be processing special categories of personal data or personal data relating to criminal convictions and offences?

No

Project information

Project title

International Collaborative Research Projects and how to manage them

Project description

Masteroppgave hvor jeg skal intervjue 7-10 respondenter om hvilken type styring og ledelse som passer i internasjonale samarbeidsprosjekter, f.eks. Horizon 2020-prosjekter, basert på deres opplevelse som ledere av slike prosjekter.

Subject area

Social sciences

Explain why the processing of personal data is necessary

Jeg vil kun trenge navn og kontaktinformasjon for å få tak i respondenter og vite deres plassering i prosjektene de har deltatt i. I den videre behandlingen av intervjuene (transkribering og skriving av oppgave)

vil jeg ikke bruke navn på mennesker eller prosjekt, kun referere til rolle og hvilken type prosjekt det har vært.

External funding

Type of project

Student project, Master's thesis

Contact information, student

May-Lill Skogli, mlskog@oslomet.no, tlf: 40244028

Data controller

Data controller (institution responsible for the project)

OsloMet - storbyuniversitetet / Fakultet for samfunnsvitenskap / Handelshøyskolen ved HiOA

Project leader (academic employee/supervisor or PhD candidate)

Sissel Hovik, sissho@oslomet.no, tlf: 67238236

Will the responsibility of the data controller be shared with other institutions (joint data controllers)?

No

Sample 1

Describe the sample

Prosjektledere/vitenskapelige koordinatorer av internasjonale samarbeidsprosjekter

Recruitment or selection of the sample

Rekruttering via egen arbeidsplass, Velferdsforskningsinstituttet NOVA, og vårt nettverk av andre forskningsinstitusjoner

Age

30 - 70

Will you include adults (18 years and over) who do not have the capacity to consent?

No

Personal data relating to sample 1

- Name (also with signature/written consent)
- Sound recordings of people
- Background data that can identify a person

How will you collect data relating to sample 1?

Personal interview

Legal basis for processing general categories of personal data

Consent (art. 6 nr. 1 a)

Information for sample 1

Will you inform the sample about the processing of their personal data?

Yes

How?

Written information (on paper or electronically)

Third Persons

Will you be processing data relating to third persons?

No

Documentation

How will consent be documented?

- Manually (on paper)

How can consent be withdrawn?

Ved å kontakte masterstudent May-Lill Skogli eller veileder professor Sissel Hovik. Kontaktinformasjon er lagt i informasjonsskrivet, som deles ut til informanter.

How can data subjects get access to their personal data or have their personal data corrected or deleted?

Ved å kontakte masterstudent May-Lill Skogli eller veileder professor Sissel Hovik. Kontaktinformasjon er lagt i informasjonsskrivet, som deles ut til informanter.

Total number of data subjects in the project

1-99

Approvals

Will you obtain any of the following approvals or permits for the project?

Processing

Where will the personal data be processed?

- Computer belonging to the data controller
- Mobile device belonging to the data controller

Who will be processing/have access to the collected personal data?

- Student (student project)

Will the collected personal data be transferred/made available to a third country or international organisation outside the EU/EEA?

No

Information Security

Will directly identifiable data be stored separately from the rest of the collected data (e.g. in a scrambling key)?

Yes

Which technical and practical measures will be used to secure the personal data?

- Personal data will be anonymised as soon as no longer needed
- Restricted access

Duration of processing

Project period

01.09.2018 - 15.06.2019

Will personal data be stored after the end of the project?

Yes, collected personal data will be stored until: 31.12.2019

For what purpose(s) will the collected personal data be stored?

Eventuell kontroll av grunnlaget for masteroppgaven

Where will the collected personal data be stored?

Internal to the data controller

Will the data subjects be identifiable (directly or indirectly) in the thesis/publications from the project?

No

Additional information

Skriftlige referanser fra datamaterialet vil kun innholde stillingen en person har hatt i et prosjekt og hvilket av EUs rammeprogram prosjektet var en del av, ikke prosjekttittel eller arbeidssted.

NSD NORSK SENTER FOR FORSKNINGSDATA

NSD's assessment

Project title

International Collaborative Research Projects and how to manage them

Reference number

824869

Registered

29.11.2018 av May-Lill Skogli - mlskog@oslomet.no

Data controller (institution responsible for the project)

OsloMet - storbyuniversitetet / Fakultet for samfunnsvitenskap / Handelshøyskolen ved HiOA

Project leader (academic employee/supervisor or PhD candidate)

Sissel Hovik, sissho@oslomet.no, tlf: 67238236

Type of project

Student project, Master's thesis

Contact information, student

May-Lill Skogli, mlskog@oslomet.no, tlf: 40244028

Project period

01.09.2018 - 15.06.2019

Status

28.01.2019 - Assessed

Assessment (2)

28.01.2019 - Assessed

Vi viser til endring registrert 28.01.2019. Vi kan ikke se at det er gjort noen oppdateringer i meldeskjemaet eller vedlegg som har innvirkning på NSD sin vurdering av hvordan personopplysninger behandles i prosjektet.

Les mer om hvilke endringer som skal registreres hos hos her, før endringer meldes inn i fremtiden: nsd.uib.no/personvernombud/meld_prosjekt/meld_endringer.html

OPPFØLGING AV PROSJEKTET
NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til videre med prosjektet!

Tlf. Personverntjenester: 55 58 21 17 (tast 1)

07.12.2018 - Assessed

Det er vår vurdering at behandlingen av personopplysninger i prosjektet vil være i samsvar med personvernlovgivningen så fremt den gjennomføres i tråd med det som er dokumentert i meldeskjemaet med vedlegg den 07.12.2018. Behandlingen kan starte.

MELD ENDRINGER
Dersom behandlingen av personopplysninger endrer seg, kan det være nødvendig å melde dette til NSD ved å oppdatere meldeskjemaet. På våre nettsider informerer vi om hvilke endringer som må meldes. Vent på svar før endringer gjennomføres.

TYPE OPPLYSNINGER OG VARIGHET
Prosjektet vil behandle alminnelige kategorier av personopplysninger frem til 31.12.2019.

LOVLIG GRUNNLAG
Prosjektet vil innhente samtykke fra de registrerte til behandlingen av personopplysninger. Vår vurdering er at prosjektet legger opp til et samtykke i samsvar med kravene i art. 4 og 7, ved at det er en frivillig, spesifikk, informert og utvetydig bekreftelse som kan dokumenteres, og som den registrerte kan trekke tilbake. Lovlig grunnlag for behandlingen vil dermed være den registrertes samtykke, jf. personvernforordningen art. 6 nr. 1 bokstav a.

PERSONVERNPRINSIPPER
NSD vurderer at den planlagte behandlingen av personopplysninger vil følge prinsippene i personvernforordningen om:

- lovlighet, rettferdighet og åpenhet (art. 5.1 a), ved at de registrerte får tilfredsstillende informasjon om og samtykker til behandlingen
- formålsbegrensning (art. 5.1 b), ved at personopplysninger samles inn for spesifikke, uttrykkelig angitte og berettigede formål, og ikke behandles til nye, uforenlige formål
- dataminimering (art. 5.1 c), ved at det kun behandles opplysninger som er adekvate, relevante og nødvendige for formålet med prosjektet
- lagringsbegrensning (art. 5.1 e), ved at personopplysningene ikke lagres lengre enn nødvendig for å oppfylle formålet

DE REGISTRERTES RETTIGHETER
Så lenge de registrerte kan identifiseres i datamaterialet vil de ha følgende rettigheter: åpenhet (art. 12), informasjon (art. 13), innsyn (art. 15), retting (art. 16), sletting (art. 17), begrensning (art. 18), underretning (art. 19), dataportabilitet (art. 20).

NSD vurderer at informasjonen om behandlingen som de registrerte vil motta oppfyller lovens krav til form og innhold, jf. art. 12.1 og art. 13.

Vi minner om at hvis en registrert tar kontakt om sine rettigheter, har behandlingsansvarlig institusjon plikt til å svare innen en måned.

FØLG DIN INSTITUSJONS RETNINGSLINJER
NSD legger til grunn at behandlingen oppfyller kravene i personvernforordningen om riktighet (art. 5.1 d), integritet og konfidensialitet (art. 5.1. f) og sikkerhet (art. 32).

For å forsikre dere om at kravene oppfylles, må dere følge interne retningslinjer og/eller rådføre dere med behandlingsansvarlig institusjon.

OPPFØLGING AV PROSJEKTET
NSD vil følge opp ved planlagt avslutning for å avklare om behandlingen av personopplysningene er avsluttet.

Lykke til med prosjektet!

Kontaktperson hos NSD: Belinda Gloppen Helle
Tlf. Personverntjenester: 55 58 21 17 (tast 1)